

Interstitial Fluid Volume of Soleus and Extensor Digitorum Longus Muscles
of AEM Control, Flight and Hindlimb-suspended Animals

Group	Interstitial Fluid Volume	
	$\mu\text{l}/100 \text{ mg muscle}$	$\mu\text{l}/\text{muscle}/100 \text{ g body wt}$
Soleus		
AEM Control	18.3 ± 0.6	7.3 ± 0.2
Flight	27.8 ± 1.3^a	6.9 ± 0.3
Suspended	30.3 ± 1.2^a	7.7 ± 0.5
Extensor Digitorum Longus		
AEM Control	15.1 ± 0.2	7.0 ± 0.1
Flight	16.2 ± 0.7	7.1 ± 0.2
Suspended	17.4 ± 0.5	7.7 ± 0.3

^a $p < 0.001$ versus AEM control by ANOVA with Bonferroni correction

AEM control animals were housed in the Animal Enclosure Module at the University of Arizona animal facility under the same temperature conditions, light-dark cycle, and duration as flight animals. Flight animals were randomly assigned and loaded into their AEM at 2300 h EDT, September 11, 1991 (launch-21h). The final flight values were determined, between 2h 8 min and 3h 22 min after landing. Suspended animals were selected from the same shipment as the AEM control group. Interstitial fluid volume was determined as described by Henriksen et al J. Appl. Physiol. 75:1650, 1993.